

What is claimed is:

1. An electronic component mounting apparatus comprising:

a rotary body;

5 a component mounting section rotatably provided with said rotary body, positioning an electronic component on a substrate in a predetermined direction, driven in an axial direction of said rotary body, and mounting the electronic component;

10 a driver for driving said component mounting section in the axial direction of said rotary body;

a coupling shaft for coupling said driver with said component mounting section; and

15 a hollow motor disposed in the axial direction of said rotary body and including a hollow rotary shaft formed with a hollow interior as a rotor;

20 wherein said hollow rotary shaft is coupled with said rotary body, is driven and rotated integrally with said rotary body by said hollow motor, and changes the direction in which said electronic component is mounted by said component mounting section.

2. The electronic component mounting apparatus according to Claim 1, further comprising:

an electric component provided in said rotary body;  
and

a wire extending from said electric component;

wherein an end of said wire extending from said electric component is substantially fixed to said rotary body with an end of said wire, and

wherein said wire is arranged in said hollow rotary shaft and in an axial direction of said hollow rotary shaft, and pulled out from said hollow rotary shaft.

3. The electronic component mounting apparatus according to Claim 2,

wherein said wire is loosely arranged in said hollow rotary shaft.

4. The electronic component mounting apparatus according to Claim 2,

wherein said wire is formed into a spiral and arranged in said hollow rotary shaft.

5. The electronic component mounting apparatus according to Claim 2,

wherein an inner surface of said hollow rotary shaft and a surface of said coupling shaft are coated with protective materials.

6. The electronic component mounting apparatus according to Claim 3,

wherein an inner surface of said hollow rotary shaft and a surface of said coupling shaft are coated with protective materials.

7. The electronic component mounting apparatus according to Claim 4,

wherein an inner surface of said hollow rotary shaft and a surface of said coupling shaft are coated with protective materials.

8. The electronic component mounting apparatus according to Claim 1,

wherein an upper end of said coupling shaft is coupled with said driver through a coupling member including a rotary plate, a guide groove formed around said rotary plate, and a bearing member whose end are bent to enter said guide groove.

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9. The electronic component mounting apparatus according to Claim 1,

wherein an lower end of said coupling shaft is coupled with said component mounting section through a fitting member formed into a plate,

wherein said fitting member is fitted to a fitting groove formed on an inner upper part of said component mounting section and is fixed to said coupling shaft,

wherein said component mounting section is provided in a hollow section of said rotary body and is movable in the axial direction of said rotary body.

10. The electronic component mounting apparatus according to Claim 2,

wherein an upper end of said coupling shaft is coupled with said driver through a coupling member including a rotary plate, a guide groove formed around said rotary plate, and a bearing member whose end are bent to enter said guide groove.

11. The electronic component mounting apparatus according to Claim 2,

wherein an lower end of said coupling shaft is coupled with said component mounting section through a fitting member formed into a plate,

wherein said fitting member is fitted to a fitting groove formed on an inner upper part of said component mounting section and is fixed to said coupling shaft,

wherein said component mounting section is provided in a hollow section of said rotary body and is movable in the axial direction of said rotary body.

12. The electronic component mounting apparatus according to Claim 5,

wherein said protective material is made of Teflon.

13. The electronic component mounting apparatus according to Claim 5,

wherein said protective material comprises a plurality of bearings.

14. The electronic component mounting apparatus according to Claim 8,

wherein said coupling member comprises balls inserted into a space between said guide groove and said

bearing member.

15. The electronic component mounting apparatus according to Claim 10,

wherein said coupling member comprises balls inserted into a space between said guide groove and said  
5 bearing member.

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